

EXHIBIT 16

Youtube Remote V1

YouTube Remote allows you to magically control your YouTube experience from your Android device.

I started the YouTube Remote project from scratch with Daniel, and with a team of 2 people and a couple of enthusiastic 20% -ers we managed in just 5 months to launch an application that has left users open mouthed.

It is fairly complex project, which consists of a Message router backend, an Android application, and a Javascript/Flash frontend. The android app itself it's not only a remote control, it is a full youtube leanback experience on its own.

I was largely responsible for the UX of the app (design and implementation), added lots of features: search, playlist editing, queue management, fling a video to the screen, sharing videos, flagging a video (this was a legal requirement and it could have blocked the launch).

I worked on improving the stability of the connection between the remote and the screen, both on the app code and the Javascript client.

I finalized the integration with the leanback screen: setting and updating a playlist from the remote, changing the current video, making sure that when the screen connects /disconnects the video starts playing on the other device.

I also created a gdata api for retrieving personalized stations

Party Mode

Party mode allows multiple users to connect to the same screen, queue up and watch videos together. All members of the party can add/reorder/delete videos to the same 'Shared Queue' of videos, which is being played on the Leanback screen. It basically solves this problem: <http://xkcd.com/920/>.

I've designed and implemented the shared queue management(both android app and server)
cl/18357652 cl/18343670

Redesigned the party mode initialization to be invitation based: cl/18677970, cl/18636464

Launched in the version 2 of the remote.

Second screen experience

YouTube Remote gives users access to a world of content about the videos they are watching with its Topics functionality, the first 2nd screen experience launched by Google. It allows users to find out more information about the topics presented in the video, such as Wikipedia information, news and videos relevant for that topic. For example, if they are watching a movie trailer, they can find out more information about the movie, such as the cast, director, ratings, filming locations and even in what theatre near you the movie may be playing. Similarly, for artists they can browse their albums and find new songs they might be interesting in watching, see their tweets or their Facebook page etc.

I single-handedly implemented the UX for the second screen experience(which includes a dedicated screen for movies, actors, directors, tv shows, artists, albums, songs).

Launched in the version 2 of the remote.

Youtube remote V2

Lots of UX tweaks thanks to our fantastic UX designer bendavies; the rating on the market went up to 4.23 (mostly 5 stars in the recent comments) and the average session length increased to 30 minutes.

Better remote-screen integration: the screen can now push the current playlist to the remote.

Added the slider, allowing the user to seek into the video : seeking in the video was super easy, just another message, but showing the user the current time in the video was the tricky part . Since sending updates from the screen every second was not really an option (over 3G every message counts) I had to create a service that estimates the current time in the video.

Added analytics.

New pairing mechanism

Currently the connection between the remote and the screen is done by having the user sign in with their google account into both devices.

I've been leading the efforts to design and implement a new pairing mechanism that allows the user to connect the mobile device to the screen without the need to sign in. This is very important as Leanback becomes more of a living room experience. It also makes it much easier to implement remote functionality into the mobile web site and integrate the remote with Leanback Lite (the Flash Lite version on Leanback installed on x million devices) and possibly the main YouTube site.

Implementing this feature requires a complete redesign of the activity flow in the android app and lots of changes on the message routing server and the remote javascript library.

Design docs:

https://docs.google.com/a/google.com/document/d/1CgNeXYdHfn034agu9Hi2xlZm8K-3Byo6OQpEd1VoTdu/edit?hl=en_US

https://docs.google.com/a/google.com/document/d/1oUeug2t9-bdZbM5fBckyUwd1vkHfNdgKgdT6ZZ799-0/edit?hl=en_US

Strenghts

* Execute quickly; see things through to completion and deliver high quality results :

- moves very fast, makes lots of progress
- launches and iterates
- versatile across multiple code bases

Short terms/ long term : demos,

Areas for Development

Networking: I have been extremely focused on getting things done and launching, that I've failed at spending time outside the project. I realize that there is much to learn from working with

Documentation: As the team expands I need to pay more attention to documenting

Promotion

Knowledge & Experience

Thanks to my Youtube API background I was very good at designing and implementing apis, gathering data from different youtube and google backends. With Youtube remote I also had to step up as the project's main frontend engineer, getting familiar with android and web development.

Goto person for youtube remote: before the launch of version 2, the remote app went through several rounds of intensive QA testing. This is the hotlist (<http://b/hotlist?id=66195>) of the bugs

that had to be fixed before launching and as you can see I fixed most of them. (I may have also caused most of them, but I think that's beside the point)

Complexity & Scope

I am co-owner of the Youtube Remote, ...

One of the most innovative and technologically challenging aspects of our project is that the content flows seamlessly between devices. And while Daniel and I have full control over the Android client and the backend server, the Leanback screen is not just a screen for the remote, it is a project on its own (and it is currently at version 3, each version developed by another team). I am crediting myself for figuring out a simple and flexible communication protocol (<https://sites.google.com/a/google.com/yt-lounge/development/communication-with-big-screen-leanback>)

between the three components of our project (remote, server, screen) that allows the user experience to feel uniform across devices and still allow each component to evolve independently. Not only has the remote been integrated with 3 completely different versions of Leanback, but we are also integrating remote functionality into the mobile web site .

Leadership & Influence

Plan and execute own work, based on long-term project objectives

This is definitely the area that it is going to prove most challenging if I am to get promoted. Because the truth is that I am in no hurry to assume any TL responsibilities. I enjoy too much being an individual contributor.

I am an eng edu facilitator, I did mentor a noogler (dhruvb)

Impact

Patent GP-3329-00-US has been filed for the unique technology used in remote controlling the screen, which is fundamentally different than what our competitors (Apple, Netflix) are using.

[fastcompany.com](https://www.fastcompany.com) nominated the Youtube Remote as one of the most innovative Android Apps of 2010, saying it is " something that AppleTV fans can only dream of".

More reactions from the blogosphere:

To me this represents a prime example of the future we're living in. I'm using the slick, intuitive, touchscreen interface of my phone to control YouTube directly and have it push its contents to the computer on my TV. It's so simple, it's so easy, it's so effortless, and I think it's easily overlooked by most people as being exceptionally cool and sophisticated